

Windmöller & Hölscher KG
Münsterstrasse 50
49525 Lengerich/Westfalen

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Cleaning of rollers in printing machines

Patent claims

1. Process for the cleaning of components (8) of rollers that are involved in the printing process. The cleaning process involves supplying solvents to these rollers that remain in the printing machine while being cleaned. The process in accordance with the present invention is

characterized by the fact that

- the printing ink is removed from the blade chamber (2) and the blade chamber (2) is filled with solvent and
- that during the cleaning an active connection is maintained between the blade chamber (2) and the uncleaned components (8) of the rollers (3, 4) that are involved in the printing process. This active connection does not interfere with the transfer of the solvent. The process in accordance with the invention is also characterized by the fact that
- the rollers (3, 4) rotate during the cleaning process
- so that solvent is transferred from the blade chamber (2) onto the uncleaned components of the rollers (3, 4) that are involved in the printing process. When the solvent arrives on the components to be cleaned, ink is diluted and/or dried residual ink is dissolved and transported back to the blade chamber by the rotation of the rollers (3, 4).

2. Process in accordance with claim 1

characterized by the fact that

components (8) of several rollers (3, 4) are cleaned, whereby first the roller (3) that is in direct contact with the blade chamber is cleaned, while the active connection with this or the other rollers (4) is interrupted and then the active connection between each cleaned roller (3) and the next adjoining roller (4) is reestablished successively.

3. Process in accordance with claim 1 or 2

characterized by the fact that

the solvent is continuously circulated inside the blade chamber (2).

4. Process in accordance with claim 3

characterized by the fact that

a part of the solvent is sucked off via a discharge line (9) from the blade chamber (2) and that a part of the discharged and/or non-contaminated solvent is fed to the blade chamber (2) via a feed line (10).

5. Process in accordance with one of the aforesaid claims

characterized by the fact that

the roller (3) that is in direct connection with the blade chamber (2) is maintained in constant rotation for its cleaning and in constant contact with the solvent contained in the blade chamber (2).

6. Process in accordance with one of the aforesaid claims

characterized by the fact that

the rollers (3, 4) between which an active connection exists, rotate with the same circumferential speeds.

7. Process in accordance with one of the aforesaid claims
characterized by the fact that
in the cleaning operation the rollers (3, 4) between which an active connection exists, are arranged closer to each other in comparison to their arrangement in the printing operation.
8. Process in accordance with one of the aforesaid claims
characterized by the fact that
the rotational direction of the rollers (3, 4) is reversed at least once.
9. Control equipment for a printing machine for the automatic implementation of a process in accordance with one of the aforesaid claims.